

WHAT IS CLAIMED IS:

- 1 1. A sensor ID registration method for a tire air pressure monitoring
2 apparatus including:
3 a sensor unit built in each of tires of a vehicle for measuring an air
4 pressure in the interior of said tire to transmit data through radio communications;
5 and
6 a receiver mounted in a vehicle body for receiving said data transmitted
7 from said sensor unit to identify said sensor unit on the basis of a sensor ID
8 included in the transmitted data and to monitor said air pressure in the interior of
9 said tire,
10 said method comprising the steps of:
11 transmitting a specific number allocated to a control unit, which makes
12 communications with said receiver, from said control unit to said receiver;
13 transmitting a specific number identical to said specific number of said
14 control unit from a sensor ID registration communication unit to said sensor unit;
15 transmitting said data including said sensor ID and said specific number
16 from said sensor unit; and
17 in said receiver, making a decision as to whether or not said specific
18 number transmitted from said control unit agrees with said specific number
19 included in said data transmitted from said sensor unit so that, when they agree
20 with each other, said receiver registers said sensor ID included in the transmitted
21 data.
- 1 2. The method according to claim 1, wherein said data has a pressure data
2 area in which a value of said air pressure in the interior of said tire is set, and said
3 data is transmitted in a state where said specific number is set in said pressure data
4 area.

1 3. The method according to claim 1, wherein said data has a number area in
2 which said specific number is set, and said data is transmitted in a state where said
3 specific number is set in said number area.

1 4. The method according to claim 1, wherein said control unit and said
2 sensor ID registration communication unit are placed for each manufacturing line
3 and a number set for each manufacturing line is used as said specific number.

1 5. A sensor ID registration method for a tire air pressure monitoring
2 apparatus including a sensor unit built in each of tires of a vehicle for measuring
3 an air pressure in the interior of said tire to transmit data through radio
4 communications and a receiver mounted in a vehicle body for receiving said data
5 transmitted from said sensor unit to identify said sensor unit on the basis of a
6 sensor ID included in the transmitted data and to monitor said air pressure in the
7 interior of said tire,
8 said method made to implement sensor ID registration through the use of a
9 control unit and a sensor ID registration communication unit provided in each
10 vehicle manufacturing line, and comprising:
11 a step of transmitting a control unit number, uniquely allocated to said
12 control unit, from said control unit to said receiver;
13 a step of giving an instruction signal from said sensor ID registration
14 communication unit to said sensor unit for transmitting a specific number,
15 identical to said control unit number, to said receiver;
16 a step of transmitting said data including said air pressure, said sensor ID
17 and said specific number from said sensor unit to said receiver;
18 a step of, in said receiver, making a decision as to whether or not said
19 control unit number transmitted from said control unit agrees with said specific
20 number included in said data transmitted from said sensor unit; and

21 a step of, when said control unit number agrees with said specific number,
22 registering said sensor ID included in the transmitted data.

1 6. The method according to claim 5, wherein, in the sensor ID registering
2 step, when said control unit number agrees with said specific number, said sensor
3 ID is temporarily registered, and when the number of temporarily registered
4 sensor IDs agrees with the number of sensors built in said tires of said vehicle,
5 said sensor ID is formally registered.

1 7. The method according to claim 5, wherein said data has a pressure data
2 area in which a value of said air pressure in the interior of said tire is set, and said
3 data is transmitted in a state where said specific number is set in said pressure data
4 area.

1 8. The method according to claim 7, wherein said control unit number is set
2 at a value lower than the atmospheric pressure.